

MANUAL of
Revolving Door Construction
and Architectural Design
with Architects'
Standard Specifications



*This book is published in the
interest of ARCHITECTS &
CONTRACTORS by the*

**VAN KANNEL
REVOLVING DOOR COMPANY
250 WEST FIFTY-FOURTH STREET
NEW YORK CITY**

Van Kannel Revolving Door Co.,
NEW YORK, N. Y.

*Makers of Better Entrances for
Banks, Office Buildings, Retail
Establishments, Hotels, Rest-
aurants, Libraries and Public
Institutions in general, pre-
sents with Cordial Assurances
of Cooperation to*

**This Manual of Standard Specifications on
REVOLVING DOORS**

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Why Revolving Doors

(ARCHITECTS' AND CONTRACTORS' SUMMARY)



No. 1. Van Kannel Doors Save Coal

Revolving Doors, by controlling the admission of cold air to buildings, conserve coal. Testimony of users frequently mention savings effected as high as 25%.

No. 2. Van Kannel Doors Promote Health

Revolving Doors promote health through the elimination of dust and drafts. This means less absence due to sickness and a higher degree of efficiency during working hours.

No. 3. Van Kannel Doors Conserve Floor Space

Revolving Doors conserve space by making large heated vestibules unnecessary and enabling the use of floor space up to the threshold of doors.

No. 4. Van Kannel Doors Eliminate the Problem of Wind Pressure against Entrance Doors

By providing means of ingress and egress through an entrance way consisting of four wings suspended on a ball-bearing carriage—perfectly balanced and adjusted—the problem presented by high wind pressure against entrance doors is absolutely eliminated.

No. 5. Van Kannel Doors Eliminate Entrance Dust

Since dust at entrances must be carried into the building by draughts of air and since draughts of air at entrances are absolutely eliminated by Van Kannel Doors, this objectionable feature of dust admission at entrance doors is overcome.

No. 6. Van Kannel Doors Increase Efficiency

Health is one requisite to efficiency—(See No. 2 above). In addition to this, Revolving Doors eliminate outside street noises more effectively than any other type of door and provide the best means available for controlling traffic and affording perfect ventilation at entrances.

No. 7. Van Kannel Doors Eliminate Entrance Traffic Confusion

Revolving Doors automatically divide traffic into incoming and outgoing streams. They eliminate confusion—their capacity at normal operation is greater

than that of swinging doors. Tests on record at Marshall Field's store, Chicago (users of 50 Van Kannel Revolving Doors), are a forceful evidence of the ability of revolving doors to handle large masses of people quickly and efficiently. In a special closing hour test from 5 P. M. to 5:10 P. M., a period of ten minutes, one door readily accommodated 1132 people. This is at the rate of 6792 people per hour.

No. 8. Van Kannel Doors Provide for Better Ventilation

Revolving Doors solve the ventilation problem at entrances, closing entrance to rain and snow—heat and cold—wind and dust, providing at the same time a door which permits easier access to building than swinging doors. Erection of storm doors is rendered unnecessary.

No. 9. Van Kannel Doors Meet any Emergency

An automatic Collapsible Revolving Door will collapse under pressure in case of panic. Their use guarantees the utmost available in a safe entrance. They are recognized by all building codes.

No. 10. Van Kannel Doors Are Built to Endure

Three decades of satisfactory service are proof of Van Kannel durability. Single doors have served over 50,000,000 people. We have innumerable records of doors in use over 17 years and with a minimum of repairs. Users of Van Kannel Doors have evidenced their satisfaction by making purchases of over 3000 additional revolving doors for their other entrances.

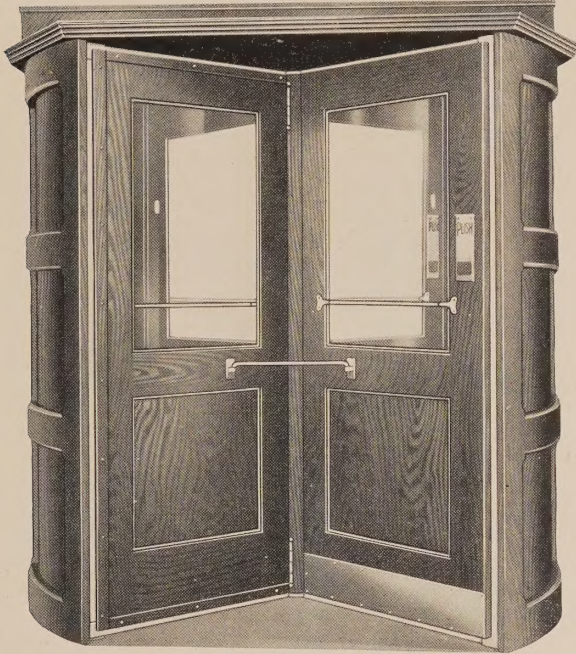
No. 11. Van Kannel Doors Harmonize with Entrance Designs

That part of an establishment which makes the first direct impression upon the people who enter is the entrance. The Van Kannel entrance means prestige without high price—for it means quality of product with economy of operation.

No. 12. Van Kannel Doors Constitute the Most Economical Design of Entrance

Due to increased efficiency obtained, to actual economies effected and to the improved appearance and increased prestige resulting from the installation of Van Kannel Doors, the results obtained from their use soon eliminate the question of cost.

Standard Specifications



TYPE: Stock "SERIES" (Collapsible)

DESIGN: 1-S

MATERIAL: White Pine

Specification

"Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design Stock "Series" No. 1, Collapsible. Woodwork to be White Pine, finish to match surrounding trim." (See specification for standard equipment at bottom of this page.)

TYPE: Stock "SERIES" (Collapsible)

DESIGN: 2-S

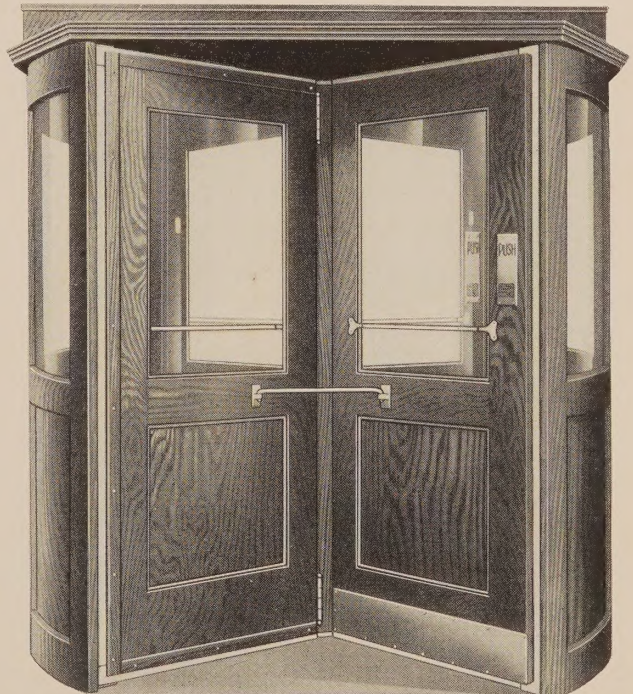
MATERIAL: White Pine

Specification

"Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design Stock "Series" No. 2, Collapsible. Woodwork to be White Pine, finish to match surrounding trim." (See specification for standard equipment below.)

Specification for Standard Equipment

"The Revolving Door Contract to include the revolving wings, circular walls, ceiling and cornice, together with all necessary mechanism, hardware, push bars, push plates, keylocks and kickplates. All glass, either bent or flat, to be best selected American polished plate."



Standard Specifications



TYPE: Stock "VK" (Collapsible)

DESIGN: 6

MATERIAL: Birch or Oak

Specification

"Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design Stock "VK" No. 6 S. P., Collapsible or Design Stock "VK" No. 6 A. P., Automatic Collapsible. Woodwork to be Plain Oak or Birch, Finish to match surrounding trim." (See specification for standard equipment at bottom of page 3).

Design No. 5 is the same as Design No. 6 above described and illustrated, with the exception that wood panels are used in side walls instead of glass.

Specification

"Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design Stock "VK" No. 5 S. P., Collapsible, or Design Stock "VK" No. 5 A. P., Automatic Collapsible. Woodwork to be Plain Oak or Birch, Finish to match surrounding trim." (See specification for standard equipment at bottom of page 3.)

TYPE: Stock "SPECIAL" JC

AUTOMATIC

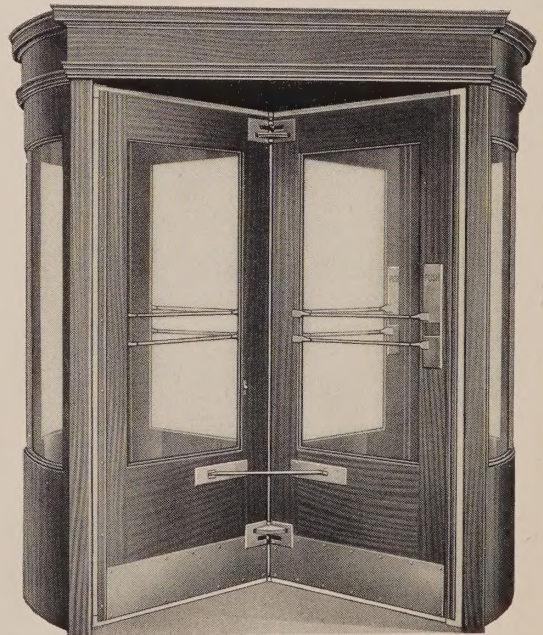
Collapsible Hardware

DESIGN: 1192-4

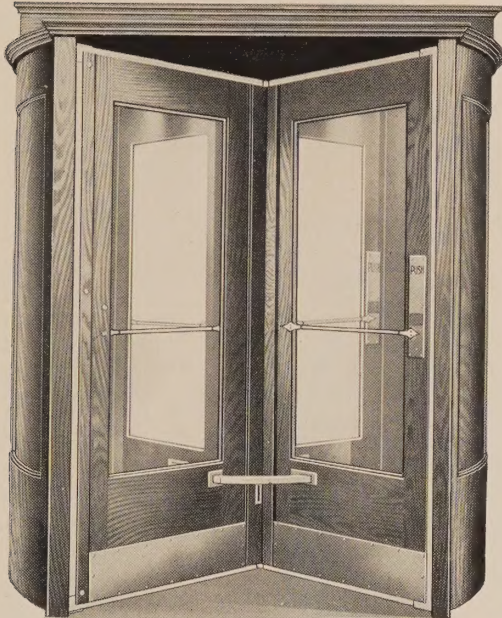
MATERIAL: Birch

Specification

"Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make. Design Stock "Special" Automatic Collapsible Panic Proof mechanism. Woodwork to be Birch, Finish to match surrounding trim." (See specification for standard equipment at bottom of page 3.)



Standard Specifications



TYPE: C, RIGID BRACE ARM
(Collapsible)

STANDARD DESIGN: 1192-1

Specification

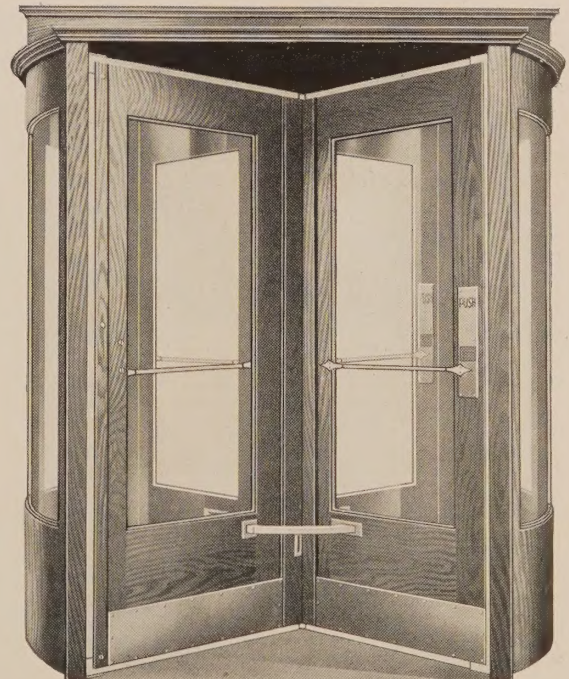
“Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-1 (Vestibule Finished on both sides) or Design 1192-1-U (Vestibule Finished on inside only), Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if metal) either kalamein plate on wood core construction or hollow metal.” (See specification for standard equipment at bottom of page 3.) The illustration at the left shows door of above design constructed of Quartered Oak.

TYPE: C, RIGID BRACE ARM
(Collapsible)

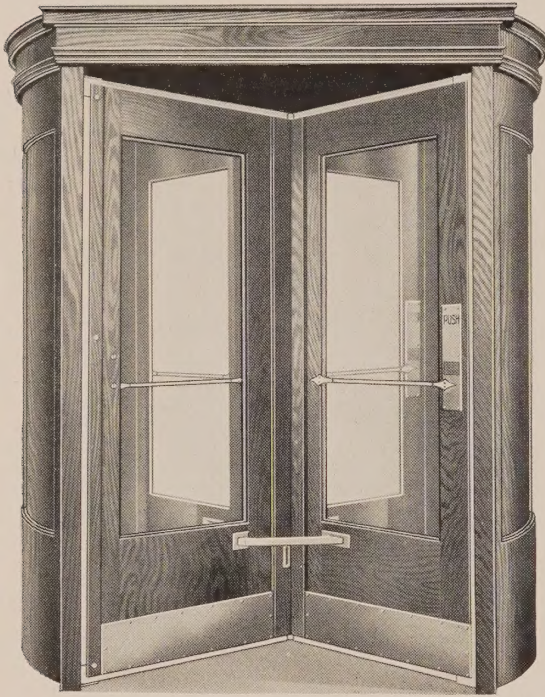
STANDARD DESIGN: 1192-2

Specification

“Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-2; Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if meta) either kalamein plate on wood core construction or hollow metal.” (See specification for standard equipment at bottom of page 3.) The illustration at the right shows door of above design constructed of Quartered Oak.



Standard Specifications



TYPE: C, RIGID BRACE ARM
(Collapsible)

STANDARD DESIGN: 1192-3

Specification

“Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-3, Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if metal) either kalamein plate on wood core construction, or hollow metal.” (See specification for standard equipment bottom of page 3.) The illustration at the left shows door of above design constructed of Quartered Oak.

TYPE: C, RIGID BRACE ARM
(Collapsible)

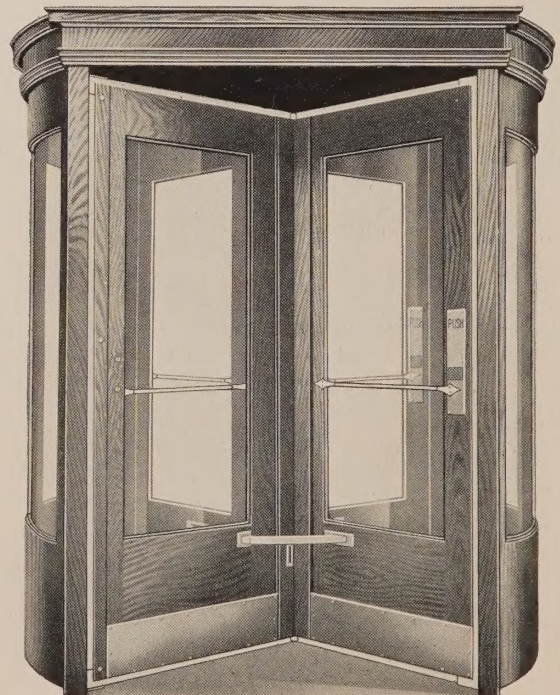
STANDARD DESIGN: 1192-4

Specification

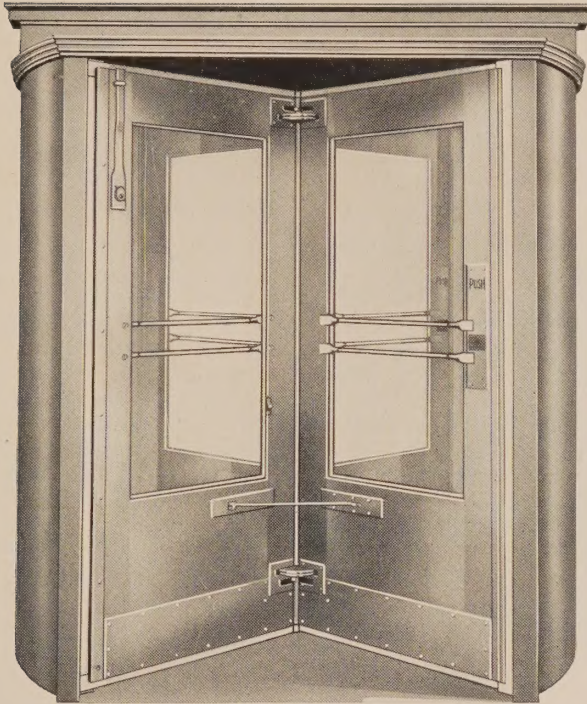
“Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-4, Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if metal) either kalamein plate on wood core construction or hollow metal. (See specification for standard equipment bottom of page 3.) The illustration at the right shows door of above design constructed of Quartered Oak.

Type “N” Fixtures

This type of fixture may be applied to any four-wing design of Van Kannel Revolving Door, made of any material. The four wings are held in their revolving position by means of metal brace arms in the form of hooks. When it is desired to fold the wings for any reason it is only necessary to unhook the brace arms and hook them back against the fixed wings, since all the four brace arms are attached to these wings by means of sockets. After the brace hooks are caught back, as above mentioned, the two hinged wings can be folded and the revolving door may assume positions illustrated on page 15.



Standard Specifications



TYPE: JC, AUTOMATIC COLLAPSIBLE

STANDARD DESIGN: 1192-1

Specification

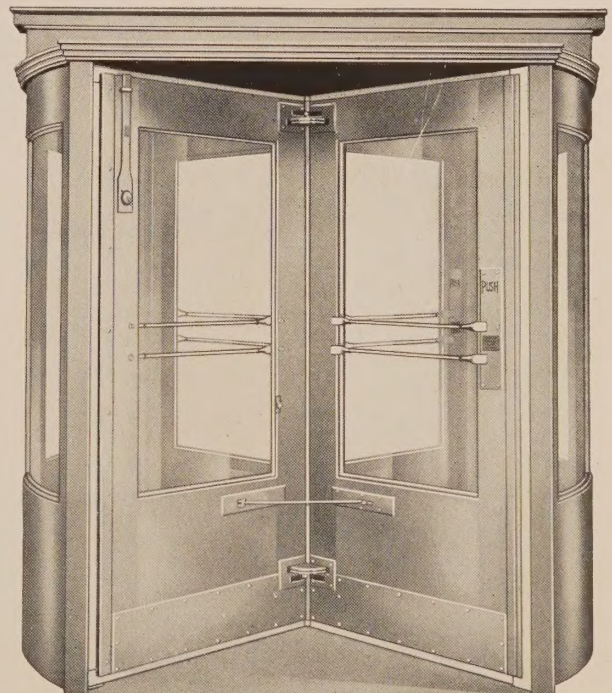
"Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-1 (Vestibule finished on both sides) or 1192-1-U (Vestibule finished on inside only), Automatic Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if metal) either kalamein plate on wood core construction or hollow metal." (See specification for standard equipment bottom of page 3.) The illustration at the left shows door of above design constructed of 20 gauge bronze plate on wood core.

TYPE: JC, AUTOMATIC COLLAPSIBLE

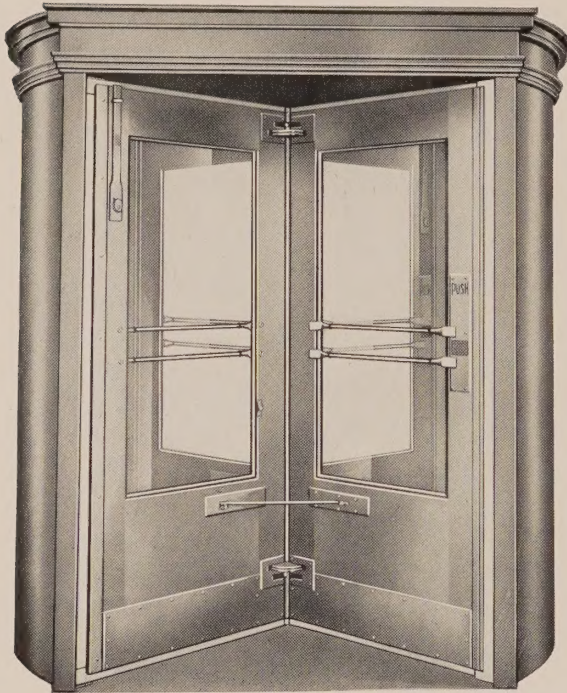
STANDARD DESIGN: 1192-2

Specification

"Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-2, Automatic Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if metal) either kalamein plate on wood core construction or hollow metal." (See specification for standard equipment bottom of page 3.) The illustration at the right shows door of above design constructed of 20 gauge bronze plate on wood core.



Standard Specifications



TYPE: JC, AUTOMATIC COLLAPSIBLE

STANDARD DESIGN: 1192-3

Specification

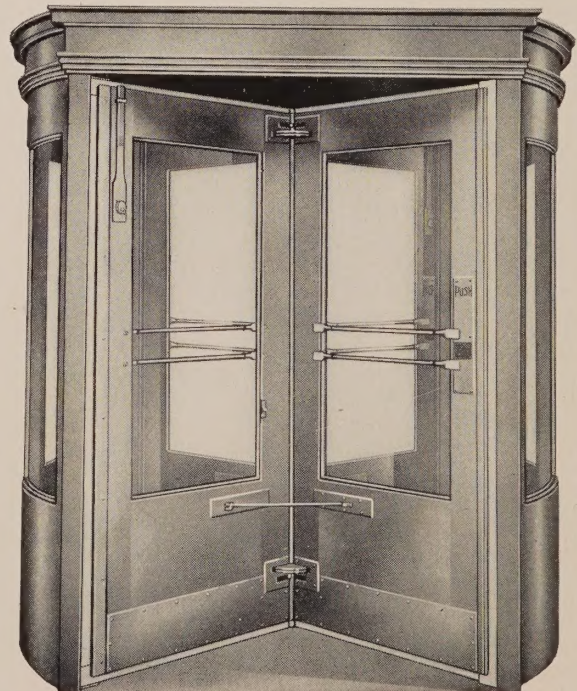
“Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-3, Automatic Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if metal) either kalamein plate on wood core construction or hollow metal.” (See specification for standard equipment bottom of page 3.) The illustration at the left shows door of above design constructed of 20 gauge bronze plate on wood core.

TYPE: JC, AUTOMATIC COLLAPSIBLE

STANDARD DESIGN: 1192-4

Specification

“Furnish and install where shown on plans, revolving doors of the Van Kannel Revolving Door Company make, Design 1192-4, Automatic Collapsible. Material: (if wood) the kind selected to match surrounding trim; (if metal) either kalamein plate on wood core construction or hollow metal.” (See specification for standard equipment bottom of page 3.) The illustration at the right shows door of above design constructed of 20 gauge bronze plate on wood core.



Three Wing Door

In addition to the four-wing Van Kannel Revolving Doors, described on the preceding pages, there is also manufactured a three-wing type of revolving door. This is convenient when space available will not allow of a larger vestibule.

The dimensions required in width are from 4 feet 8 inches to 6 feet; height, 6 feet 6 inches to 7 feet 6 inches.

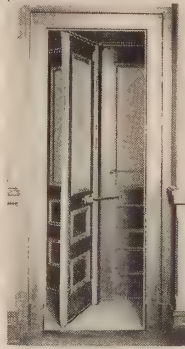
The capacity of the three-wing type of revolving door is substantially less than that of the four-wing type, but is greater than that of a single swinging door. In addition it affords all of the advantages of the always closed yet always open entrance. This type of door is manufactured in any of the materials heretofore described and in the same high grade manner.

There are two types of three-wing revolving

door which we manufacture, type "MB" and type "MC."

Type "MB" three-wing revolving door has the three wings held in a rigid revolving position by rigid braces which do not allow the wings to be folded in the middle or to be moved to one side of the vestibule; this type merely acting on the ordinary turnstile principle.

Type "MC" three-wing revolving door is similar to type "MB" excepting that the wings are arranged by a series of hinges and hook braces so that the wings can be folded together in the middle for a third open position, central open position and also the wings moved to one side of the vestibule for a full open position when desired. The illustration on this page shows one of the thirty-six three-wing type of revolving doors in use in the Prudential Life Insurance Co. offices at Newark, N. J.



One of the 36 three-wing type revolving doors used by the Prudential Life Insurance Company at Newark, N. J.

Standard Equipment

Ball Bearing Hanger Makes Van Kannel Doors Better

It is interesting to note that one of the basic principles of that most modern adjunct to better entrances, Van Kannel Revolving Doors, is similar to that of ancient doors, namely, the doors are hung on a pivot. In the Van Kannel Revolving Door, however, the basic principle has, of course, been greatly improved. The revolving wings are hung from a ball bearing carriage located in the ceiling chamber, and this carriage is so constructed that it can be released from its central position and moved to one side of the vestibule, by means of a lever controlled by a pivot lifter. The pivot lifter releases the lever holding the carriage in the ceiling chamber, and also raises the pivot in the floor socket in one operation, releasing the wings instantly.

Air Lock—A Feature

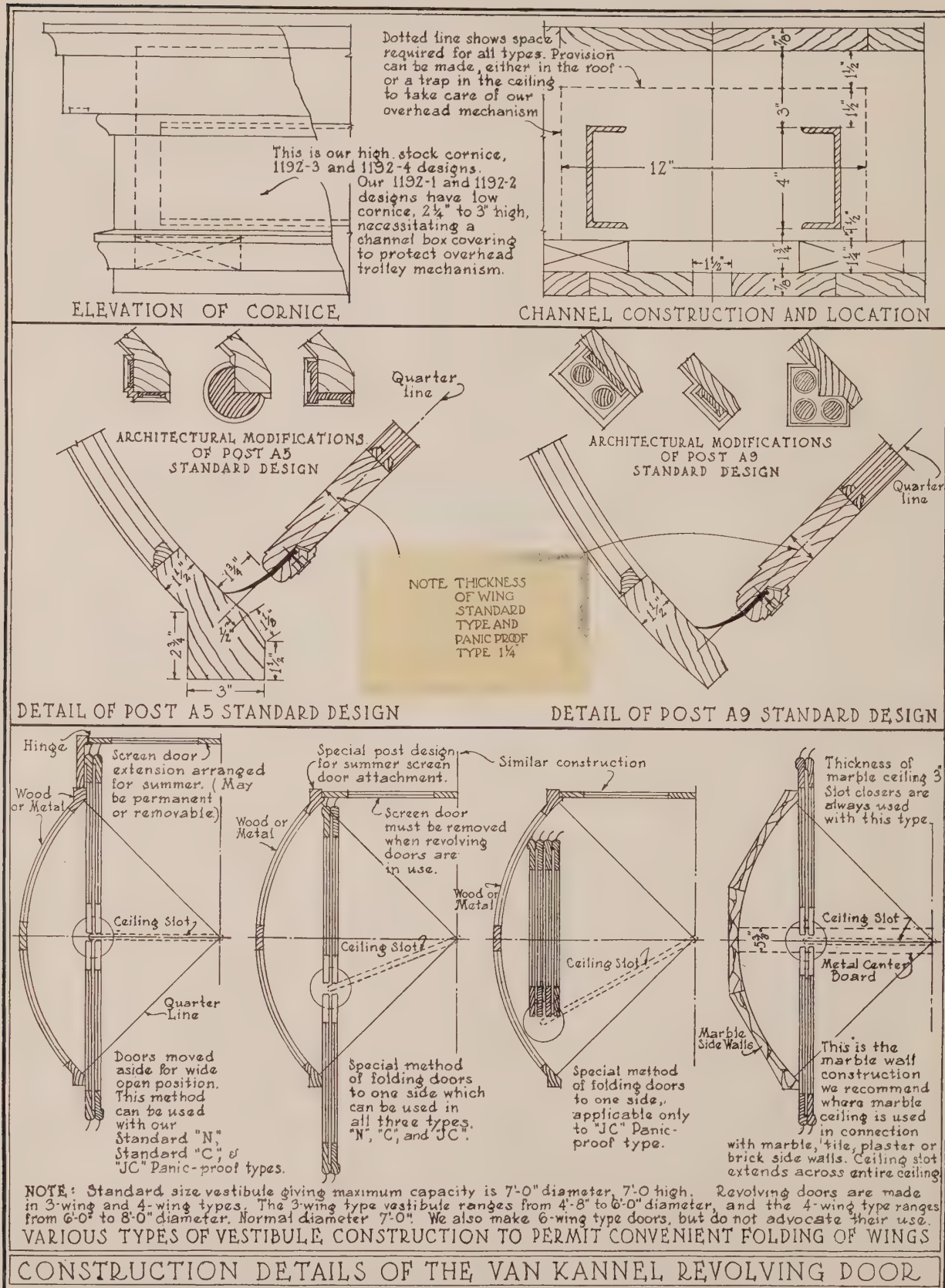
Each wing of the revolving door is equipped with adjustable weather stripping at outer edge, top and bottom.

The stripping at top is best quality extra heavy felt; stripping at outer edge is of specially moulded rubber, tipped with best quality heavy felt; stripping at bottom is plain flexible rubber. All corners of strips are properly joined together. The weather stripping gives the revolving door vestibule its air-locking properties within the circular vestibules, as two opposite wings are in contact with the enclosure at all times.

Governing Device Another Improvement

The Governing Device is one of the many special features connected with the manufacturing and superior equipment of Van Kannel Revolving Doors, the only ideally equipped type of revolving door in the world. This device consists of a specially constructed bearing which retards excessive speed of door, this retardation being augmented by resistance furnished by felt and rubber strips at top, bottom and side of wings. The installation of a speed governing device does not in any way interfere with the free rotation of the wings.

All of the above-described fixtures are standard equipment on all types of Van Kannel Revolving Doors.



Construction Features

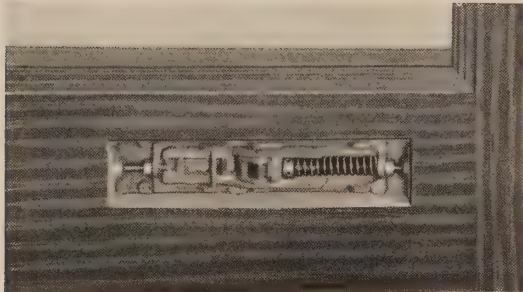


FIGURE 1

TYPE: JC (AUTOMATIC COLLAPSIBLE) CABLE RELEASING MECHANISM

The automatic cable releasing mechanism here illustrated is adjusted for normal pressure before leaving the factory. In case door is subject to excessive wind pressures, adjustment is easily and positively accomplished by simply tightening or releasing the spring tension which is accomplished by turning the adjustment nut here shown. This nut is locked by set screw.



FIGURE 2

TYPE: JC (AUTOMATIC COLLAPSIBLE) METHOD OF COLLAPSING

To manually collapse the automatic panic proof type it is only necessary to pinch together the releasing pawl and cable end as here illustrated. The cable head instantly drops from its setting and wings can be swung into position for pushing to side of entrance way.



FIGURE 3

TYPE: JC (AUTOMATIC COLLAPSIBLE) FOLDING BAR

Wings are held in "Central open position" (See Plan, page 15, figure 3), by means of bars here shown which are provided with pins which readily drop into holes in circular disc.

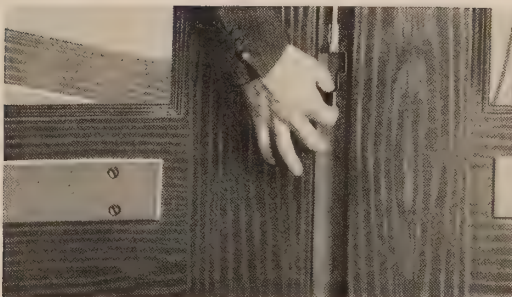
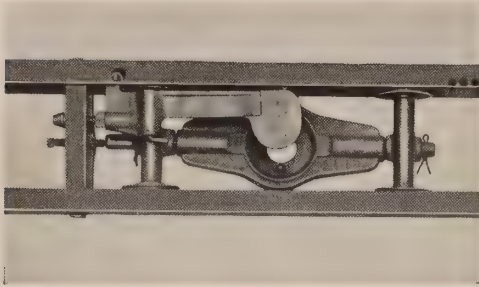


FIGURE 4

TYPE: JC (AUTOMATIC COLLAPSIBLE) PIVOT LIFTER

Van Kannel Revolving Doors are all suspended from an overhead trolley, the socket in floor which receives end of center shaft merely acting as a guide. The center shaft, however, *does not revolve in the socket* but revolves around a pivot which is locked down into floor socket in such a manner that it cannot turn. Thus wear on floor socket is reduced to an almost negligible factor. The photograph shows end of pivot by means of which it is raised clear of floor socket, permitting the wings to be moved aside.

Overhead Trolley Construction



1. Top view of overhead trolley used for Types JC and C.



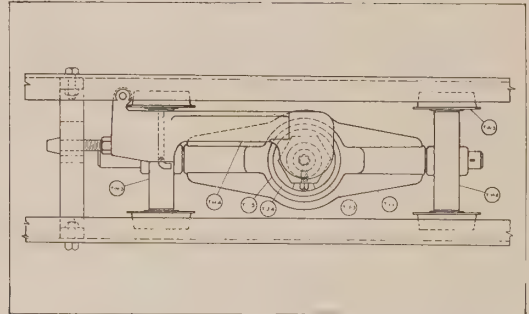
3. Side view of same trolley shown in Figure 1 above—showing how carriage is held in place by Arm No. T-H-4 and how carriage rests on channel iron track.



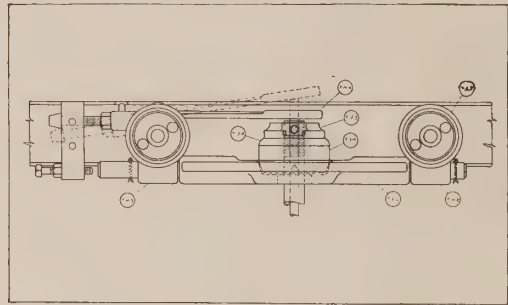
5. Top view of overhead trolley used for "VK" type doors.



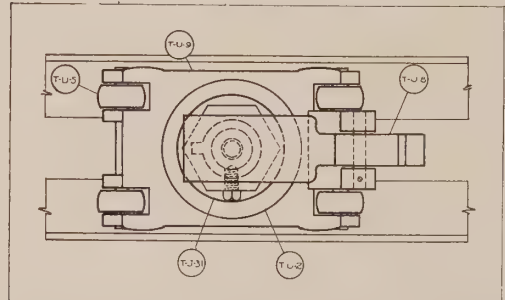
7. Side view of same trolley shown in Figure 5 above. Note how carriage is held in place by Arm T-U-8. On raising this arm, carriage is easily rolled aside carrying wings.



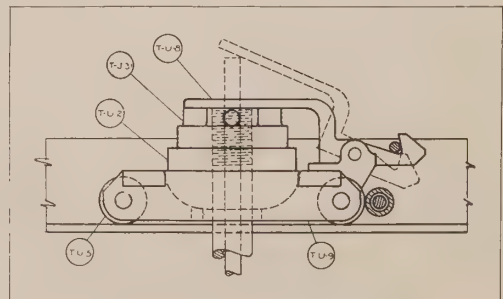
2. Sketch of same mechanism shown in Figure 1. When Pivot Lifter (see page 11, Figure 4) is raised, it in turn raises arm No. T-H-4 (see position indicated by dotted lines in Fig. 4 below) which releases carriage and permits same to be rolled aside.



4. Drawing of same mechanism illustrated in Figure 3.

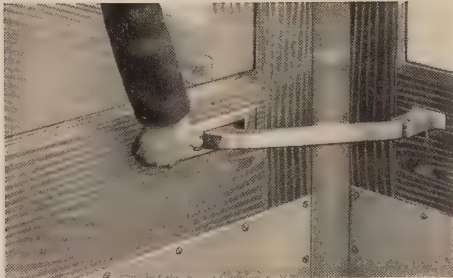


6. Drawing of same mechanism illustrated in Figure 5. When Pivot Lifter is raised, it in turn raises Arm No. T-U-8 (see position indicated by dotted lines in Fig. 8 below) which releases carriage and permits same to be rolled aside.



8. Drawing of same mechanism shown in Figure 7.

Construction Features



TYPE: C (COLLAPSIBLE)

METHOD OF COLLAPSING

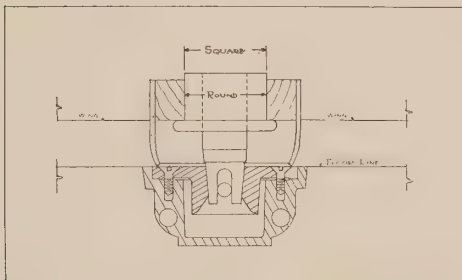
The simple pressing of a Pawl on all "C" type Rigid Brace Arm doors, permits wings to assume parallel position (See figure 3, page 15), ready to be moved aside out of entrance or to assume other positions shown on page 15.



TYPE: N (COLLAPSIBLE)

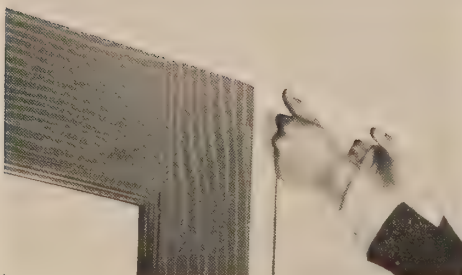
METHOD OF COLLAPSING

Collapsing of an N type door is accomplished by merely raising arm out of socket provided. This arm is hooked to wing on which it is attached.



FLOOR SOCKET CONSTRUCTION USED IN JC, C, N and VK TYPES

This illustration shows how Pivot on JC, C, N and VK types is locked in an immovable position in floor socket. The center shaft of revolving door rides around the pivot. Note that to replace floor socket, removable Section may be replaced without disturbing the setting of the floor socket holder.



REPLACEMENT OF TOP AND BOTTOM FELT AND RUBBER STRIPS

By taking out the screws along top and bottom of wings, felt or rubber strips which are tacked to wood strip as shown in cross-section at the left are readily pulled out. New felt or rubber strips can be tacked to wood strip and the same as easily replaced.

Capacity Tests

The Answer to the Question, "Will Van Kannel Doors Handle the Crowds of People at the Entrances of the Buildings We Are Designing?"

The figures at the right in the table below, entitled "Maximum rate converted into hourly basis," are calculated by taking the highest fifteen minute performance recorded in each case and multiplying this figure by four. This simply represents the number of people the door would handle every hour in the day, every day in the week, if the people were on hand to go through it.

Capacity Tests (1 Door)

Name	At end first 15 min.	At end 30 min.	At end 45 min.	At end 60 min.	Max. rate converted into hourly basis	Name	At end first 15 min.	At end 30 min.	At end 45 min.	At end 60 min.	Max. rate converted into hourly basis
John Wanamaker's..... In	38	81	129	176	188	World Building..... In	130	227	355	496	520
New York City..... Out	31	71	105	163	232	New York City..... Out	199	308	444	629	796
Total Traffic.....	69	152	234	339	420	Total Traffic.....	329	535	799	1125	1316
Y. M. C. A..... In	99	201	278	398	480	Manhattan Life Bldg. . . In	164	311	453	559	656
New York City..... Out	55	152	245	355	440	New York City..... Out	128	238	251	432	512
Total Traffic.....	154	353	523	753	920	Total Traffic.....	292	549	804	991	1168
Hotel Commodore..... In	94	169	206	240	376	American Tract Society In	160	311	416	533	640
New York City..... Out	54	123	190	295	216	Bldg., New York City..... Out	172	310	421	516	688
Total Traffic.....	148	292	396	535	592	Total Traffic.....	332	621	837	1049	1328
Hotel Astor..... In	240	478	....	....	952	Commercial Cable Bldg. In	276	551	787	1018	1104
New York City..... Out	209	427	....	....	872	New York City..... Out	291	545	777	1034	1164
Total Traffic.....	449	905	....	....	1824	Total Traffic.....	567	1096	1564	2052	2268
Childs Restaurant..... In	337	644	931	1134	1148	Bank of Commerce Bldg. In	298	502	748	961	1192
New York City..... Out	86	162	317	487	620	New York City..... Out	200	345	533	679	800
Total Traffic.....	423	806	1248	1621	1768	Total Traffic.....	498	847	1281	1640	1992
Bank of the U. S..... In	109	....	....	....	436	Boreel Bldg..... In	82	163	231	337	424
New York City..... Out	110	....	....	....	440	New York City..... Out	100	197	274	363	356
Total Traffic.....	219	....	....	....	876	Total Traffic.....	182	360	505	700	780

BENJAMIN W. MORRIS, *Architect*,
101 Park Avenue, New York City.

MEMORANDUM

Re—Comm. No. 262—Hartford, Conn., Trust Bldg.:

Analysis of Superintendent's Report on persons entering and leaving Main Building Entrance of the Hartford-Connecticut Trust Building

PERIODS OF COUNT:

Entering Only:

March—2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 31. Twenty-five (25) Days.

Entering and Leaving:

June—4, 5, 6, 7, 8. Five (5) Days.

	Average per Hr.	Max. per Hr.
(Income Tax) March—First. 6 Days.....	418	571
(Income Tax) March—Second 6 Days.....	492	801
Normal March—Third 6 Days.....	252	390
March—Last. 7 Days.....	273	398

June—Five Days:

Entering.....	242	576
Leaving.....	243	622
Assume that between 12 and 2 on March 14th, 1,600 people entered and 1,600 people left—		

Total for two hours—both ways is.....	3200
Average per hour —both ways is.....	1600
Average per minute—both ways is.....	27
Average per minute—one way is.....	13.5
Highest per minute—one way is.....	13.3 (801/60)

Readings generally taken hourly from 8 to 5, inclusive; and six hours on Saturdays.

Page fourteen

Capacity Tests of 12 Revolving Doors installed at Equitable Building, 120 Broadway, New York, N. Y.

8 A. M. TO 6 P. M.

	In	Out	Total	Hourly Rate
Broadway Entrance (3 doors).....	22,646	21,272	43,918	4,392
Cedar St. Entrance (2 doors).....	4,188	5,412	9,600	960
Pine St. Entrance (2 doors).....	7,122	7,505	14,627	1,462
Nassau St. Entrance (3 doors).....	15,719	15,484	31,203	3,120
Subway Entrance (2 doors).....	7,410	5,288	12,698	1,270
Total Traffic.....	57,085	54,961	112,046	11,204

Note:—The Broadway entrance, consisting of 3 doors, approximately 25 per cent. only of the total entrance equipment, handled approximately 40 per cent. of the traffic.

Conditions During Test

You will note that in the tests recorded above all major classes of users of revolving doors are represented.

In the majority of cases these buildings are the largest of their kind in the City of New York, and the tests were made on the busiest days at the busiest hours as far as could be determined.

Tests above tabulated record the number of people passing through one door only. When more than one door was used in a building, the most active door was selected for the purpose of test, and you will find that the number of people passing through these entrances, as above recorded, are far in excess of average demands on entrance doors.

A test of particular interest not mentioned above was made at the closing hour at Marshall Field & Co.'s Chicago store. Marshall Field & Co. use over 50 Van Kannel Revolving Doors. They selected one of the busiest entrances and made their test from 5 P. M. to 5.10 P. M., in which space of 10 minutes the door readily accommodated 1,132 people, 57 in and 1,075 out. These figures converted into an hourly basis indicate that the Van Kannel door was handling the people at the rate of 6,792 per hour.

It is a striking commentary, therefore, that though the entrances used for test purposes in the above table are in some of the largest buildings of their character in the world, these entrances in no instance even approached at their busiest period of the day the normal capacity of their Van Kannel Revolving Doors.

Positions

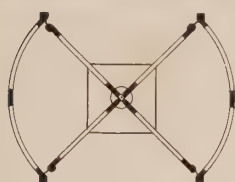
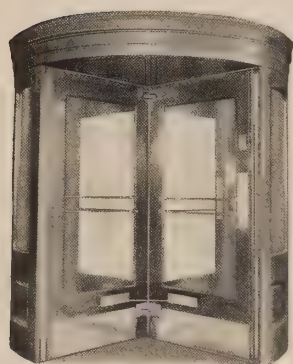


Fig. 1

Revolving Position

The four wings extended, permitting persons to pass in and out, at the same time excluding noise, rain and snow, heat and cold, wind and dust.

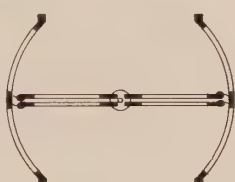


Fig. 2

Locked Position

The four wings folded in pairs and placed across vestibule, securely locked or bolted. Lock operates from both sides.

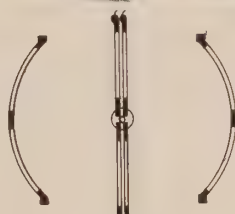
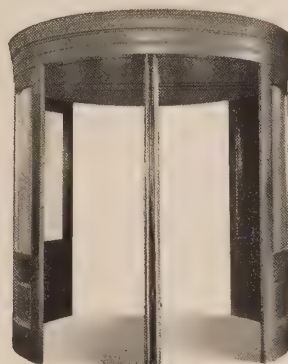


Fig. 3

Central Open Position

Wings folded flat in pairs and held in position by folding bars, making two passages separating traffic.

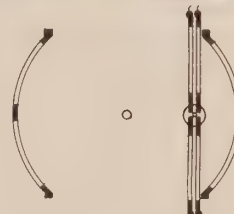


Fig. 4

Full Open Position

Wings folded and moved aside, making available full width of entrance.



Fig. 5

Panic Collapsed Position

Wings folded on each other in outward position, dividing traffic into two streams.

Type Stock "Series"
Positions Nos. 1, 2, 3 and 4 assumed by wings.

Note:—One wing may also be folded at a time if desired.

Type Stock "VK"
Positions Nos. 1, 2, 3 and 4 assumed by wings.

Note:—One wing may also be folded at a time if desired.



Fig. 6

Full Open Position With Wings Collapsed

Wings folded on each other and moved to one side making available full width of entrance.

Positions Assumed by Wings—All Types of Doors

Type Stock "Special"

Positions Nos. 1, 2, 3, 4 and 5 assumed by wings.

Note:—One wing may also be folded at a time if desired.

Type C Collapsible

Positions Nos. 1, 2, 3 and 4 assumed by wings.

Note:—One wing may also be folded at a time if desired.

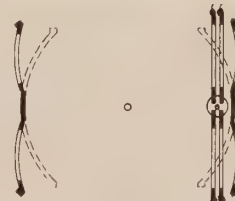


Fig. 7

Full Open Position With Flexed Walls

Wings folded and moved aside with hinged walls flexed for added space.

Type N Collapsible

Positions Nos. 1, 2, 3 and 4 assumed by wings.

Note:—One wing may also be folded at a time if desired.

Type JC Automatic Collapsible

Positions Nos. 1, 2, 3, 4 and 5 assumed by wings.

Note A:—One wing may be folded at a time if desired.

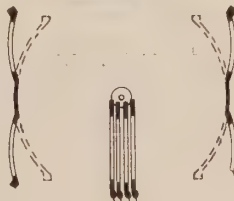
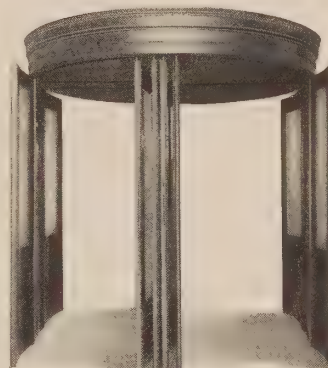


Fig. 8

Panic Collapsed Position With Flexed Walls

Wings folded on each other in outward position with walls flexed for added space.

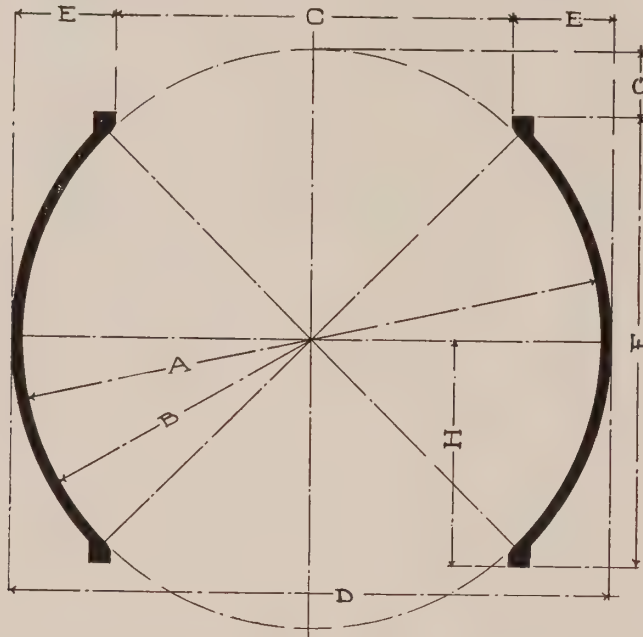
Type JC Automatic Collapsible—Cont.

Note B:—Special trolley construction can be furnished which will permit wings to assume position shown in Figure No. 6 above.

Note C:—FLEXED WALLS: In order to provide added entrance space where desired, flexed wall construction can be furnished which will permit wings to assume positions shown in Figures 7 and 8 above.

Table of Dimensions

The following diagram will prove of service in indicating the various dimensions of revolving doors of the sizes recommended by the Company as practical for all purposes.



A	B	C	D	E	F	G	H
5'-8"	2'-10"	3'-10 $\frac{1}{2}$ "	5'-11"	1'-0 $\frac{3}{4}$ "	4'-5 $\frac{3}{4}$ "	7 $\frac{1}{8}$ "	2'-2 $\frac{1}{2}$ "
5'-10"	2'-11"	3'-11 $\frac{1}{2}$ "	6'-1"	1'-0 $\frac{3}{4}$ "	4'-7 $\frac{1}{4}$ "	7 $\frac{3}{8}$ "	2'-3 $\frac{3}{8}$ "
6'-0"	3'-0"	4'-1"	6'-3"	1'-1"	4'-8 $\frac{1}{2}$ "	7 $\frac{3}{4}$ "	2'-4 $\frac{1}{2}$ "
6'-2"	3'-1"	4'-2 $\frac{1}{2}$ "	6'-5"	1'-1 $\frac{1}{2}$ "	4'-10"	8"	2'-5"
6'-4"	3'-2"	4'-4"	6'-7"	1'-1 $\frac{1}{2}$ "	4'-11"	8 $\frac{1}{8}$ "	2'-5 $\frac{1}{2}$ "
6'-6"	3'-3"	4'-5 $\frac{1}{2}$ "	6'-9"	1'-2"	5'-0"	8 $\frac{1}{4}$ "	2'-6"
6'-8"	3'-4"	4'-6 $\frac{1}{2}$ "	6'-11"	1'-2 $\frac{1}{2}$ "	5'-2"	8 $\frac{3}{8}$ "	2'-6 $\frac{1}{2}$ "
6'-10"	3'-5"	4'-8"	7'-1"	1'-2 $\frac{3}{4}$ "	5'-3 $\frac{1}{2}$ "	9 $\frac{1}{4}$ "	2'-7 $\frac{1}{4}$ "
7'-0"	3'-6"	4'-9 $\frac{1}{2}$ "	7'-3"	1'-2 $\frac{3}{4}$ "	5'-5"	9 $\frac{3}{4}$ "	2'-8 $\frac{1}{4}$ "
7'-2"	3'-7"	4'-10 $\frac{1}{2}$ "	7'-5"	1'-3 $\frac{1}{4}$ "	5'-6 $\frac{1}{2}$ "	9 $\frac{1}{2}$ "	2'-9 $\frac{1}{4}$ "
7'-4"	3'-8"	5'-0"	7'-7"	1'-3 $\frac{1}{2}$ "	5'-8"	10"	2'-10"
7'-6"	3'-9"	5'-1"	7'-9"	1'-3 $\frac{3}{4}$ "	5'-9"	10 $\frac{1}{8}$ "	2'-10 $\frac{1}{2}$ "
7'-8"	3'-10"	5'-3"	7'-11"	1'-4"	5'-10 $\frac{1}{2}$ "	10 $\frac{3}{8}$ "	2'-11 $\frac{1}{8}$ "
7'-10"	3'-11"	5'-4 $\frac{1}{2}$ "	8'-1"	1'-4 $\frac{1}{2}$ "	6'-0"	11"	3'-0"
8'-0"	4'-0"	5'-5 $\frac{1}{2}$ "	8'-3"	1'-4 $\frac{3}{4}$ "	6'-1 $\frac{1}{2}$ "	11 $\frac{1}{4}$ "	3'-0 $\frac{1}{4}$ "
8'-2"	4'-1"	5'-7 $\frac{1}{2}$ "	8'-5"	1'-4 $\frac{3}{4}$ "	6'-2 $\frac{1}{2}$ "	11 $\frac{3}{8}$ "	3'-1 $\frac{1}{8}$ "
8'-4"	4'-2"	5'-8 $\frac{1}{2}$ "	8'-7"	1'-5 $\frac{1}{4}$ "	6'-4"	11 $\frac{1}{2}$ "	3'-2 $\frac{1}{2}$ "
8'-6"	4'-3"	5'-10"	8'-9"	1'-5 $\frac{1}{2}$ "	6'-5 $\frac{1}{2}$ "	12 $\frac{1}{8}$ "	3'-2 $\frac{3}{8}$ "
8'-8"	4'-4"	5'-11 $\frac{1}{2}$ "	8'-11"	1'-5 $\frac{3}{4}$ "	6'-7"	12 $\frac{3}{8}$ "	3'-3 $\frac{3}{8}$ "
8'-10"	4'-5"	6'-0"	9'-1"	1'-6 $\frac{1}{4}$ "	6'-8 $\frac{1}{2}$ "	12 $\frac{1}{2}$ "	3'-4 $\frac{1}{4}$ "
9'-0"	4'-6"	6'-2 $\frac{1}{2}$ "	9'-3"	1'-6 $\frac{1}{2}$ "	6'-10"	13"	3'-5"

Standard Type Wings:
Thickness $\frac{1}{2}$ " to $\frac{1}{4}$ ", wood.
Thickness $\frac{1}{2}$ " to $\frac{1}{4}$ ", metal.

Panic Proof Type Wings:
Thickness $\frac{1}{2}$ ", wood.
Thickness $\frac{1}{2}$ " to $\frac{1}{4}$ ", metal.

Door Vestibules:
4'-8" to 6'-0" diameter 3 wings.
6'-0" to 8'-0" diameter 4 wings.
8'-6" to 10'-0" diameter 6 wings.
7'-0" diameter normal.

Standard Size:
7'-0" to 7'-6" vestibules.
Large enough for maximum capacity, excepting the 10'-0" 6-wing vestibule.

KEY TO SIZES

Width	Height
A.....6 ft. 6 ins. and under.....	up to 7 ft. 0 ins.
B.....6 ft. 6 ins. and under.....	over 7 ft. 0 ins. to 7 ft. 6 ins.
C.....6 ft. 6 ins. and under.....	over 7 ft. 6 ins. to 8 ft. 0 ins.
D.....6 ft. 6 ins. to 7 ft. 0 ins.....	up to 7 ft. 0 ins.
E.....6 ft. 6 ins. to 7 ft. 0 ins.....	over 7 ft. 0 ins. to 7 ft. 6 ins.
F.....6 ft. 6 ins. to 7 ft. 0 ins.....	over 7 ft. 6 ins. to 8 ft. 0 ins.
G.....7 ft. 0 ins. to 7 ft. 6 ins.....	up to 7 ft. 0 ins.
H.....7 ft. 0 ins. to 7 ft. 6 ins.....	over 7 ft. 0 ins. to 7 ft. 6 ins.
I.....7 ft. 0 ins. to 7 ft. 6 ins.....	over 7 ft. 6 ins. to 8 ft. 0 ins.
J.....7 ft. 6 ins. to 8 ft. 0 ins.....	up to 7 ft. 0 ins.
K.....7 ft. 6 ins. to 8 ft. 0 ins.....	over 7 ft. 0 ins. to 7 ft. 6 ins.
L.....7 ft. 6 ins. to 8 ft. 0 ins.....	over 7 ft. 6 ins. to 8 ft. 0 ins.

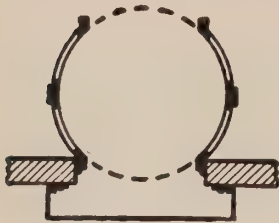
SHIPPING WEIGHTS COMPLETE, CRATED:

TABLE OF WEIGHTS

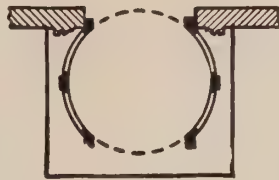
(See Key to Sizes Above)

Design	A	B	C	D	E	F	G	H	I	J	K	L
1192-1.....	1350	1375	1400	1425	1450	1475	1450	1475	1500	1475	1500	1525
1192-2.....	1600	1625	1650	1675	1700	1725	1700	1725	1750	1725	1750	1775
1192-3.....	1700	1725	1750	1775	1800	1825	1800	1825	1850	1825	1850	1875
1192-4.....	1900	1925	1950	1975	2000	2025	2000	2025	2050	2025	2050	2075
Wings only.....	925	935	950	960	975	985	975	990	1000	990	1000	1010

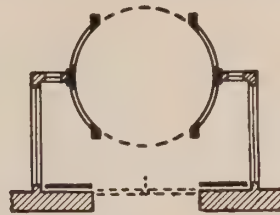
Various Positions for Placing Revolving Doors in Entrances



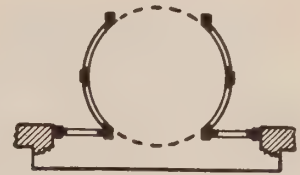
Plan No. 201 shows revolving door placed inside doorway.



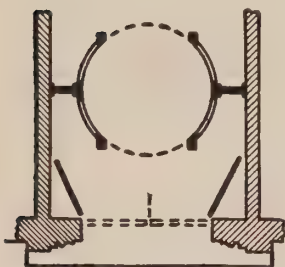
Plan No. 202—Revolving door placed outside resting on platform requires a roof over door enclosure.



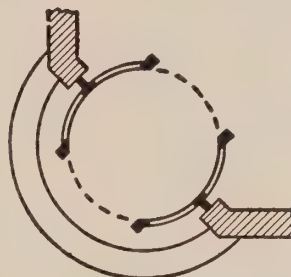
Plan No. 203—Joined to jambs of an interior vestibule, hinged doors in front for closing at night.



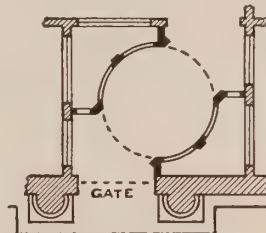
Plan No. 204—A wide entrance, space at sides of enclosure filled in by two glazed panels.



Plan No. 205—Revolving door set back in hallway, with old swing doors left in place.



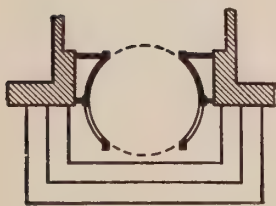
Plan No. 206—A corner entrance. Center pilaster of curved walls joined to building jambs. This method of installation usually requires a roof over exposed half of revolving door enclosure.



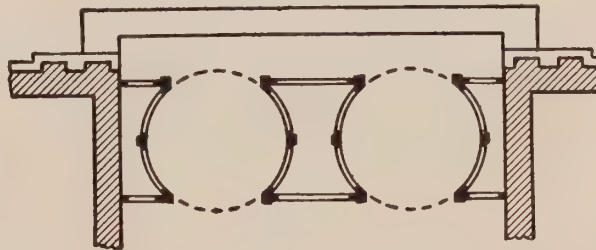
Plan No. 207—A diagonal entrance, there being an excellent approach to the revolving door both from the inside and outside.



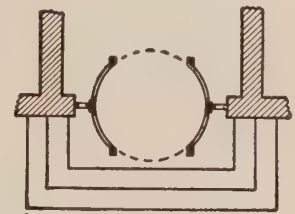
Plan No. 208—Store entrance with display window. The curved wall of the revolving door forms the glazed sash for display window. The other curved wall is made solid when placed near wall of building.



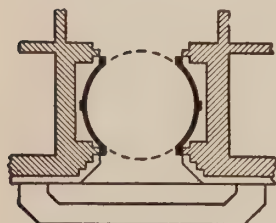
Plan No. 209—Half of revolving door inside solid wall sections, other half outside having glazed walls. Requires roof outside of transom.



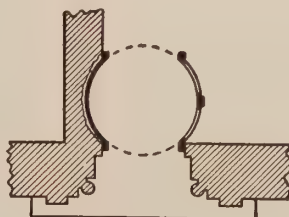
Plan No. 211—Twin revolving doors. Wide entrance (about 18 feet) giving a central display case. Cornice inside and outside straight from wall to wall. An entrance of 15 feet is sufficient for two standard doors installed in this way.



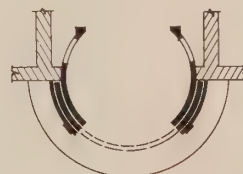
Plan No. 212—Like Plan No. 209, except that both walls are glazed.



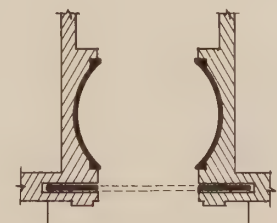
Plan No. 213—Jambs of revolving doors join directly to the four jambs of the building.



Plan No. 214—Shows building wall cut out to permit curved wall of revolving door being put in place, making a correct junction at front entrance.



Plan No. 215—Revolving door centrally located with specially constructed curved sliding doors and wall pockets.



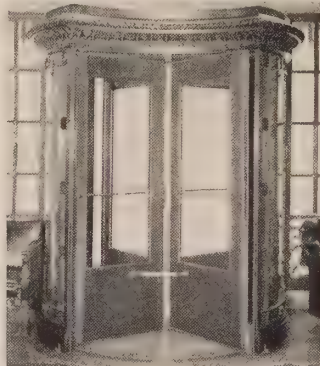
Plan No. 216—Solid wall construction with a sliding door and pockets to receive same inside walls.

A Few Examples of Van Kannel Adaptability

The illustrations on this and the following three pages are indicative of the adaptability of Van Kannel Doors and the manner in which they can be readily made to harmonize with any architectural treatment.



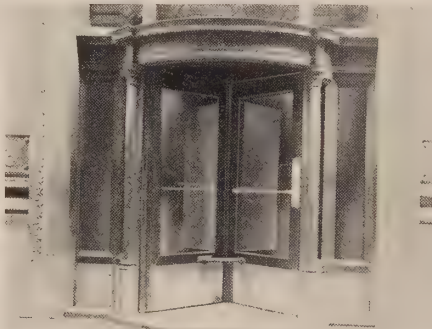
C-type collapsible, special design, material-cast bronze and wood or could be constructed of all bronze.



Hollow bronze with practically an all cast vestibule, wings 16 gauge bronze over wood, C-type collapsible hardware.



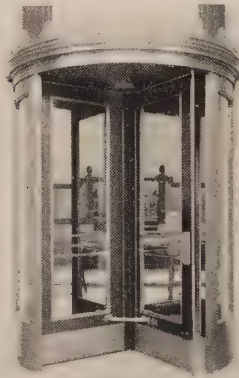
1192-4 Special design with side fillers and pediment over opening; JC automatic collapsible hardware. Regular equipment.



1192-4 Special design with side fillers special 9-A post (see page 10), engaged columns, carved wood caps and bases. Carved dentil course in corners.



Louis XIV style, could be made in either wood or metal, collapsible C-type hardware.



All circular cornice with Chaneau cresting of cast bronze, collapsible C-type hardware, panelled ceiling and special low bottom rail. Two extra hand rails.



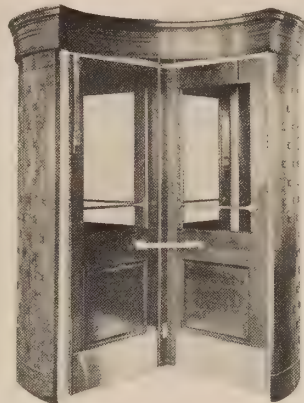
Louis XV or Rococo design, collapsible C-type hardware.

Special Constructions

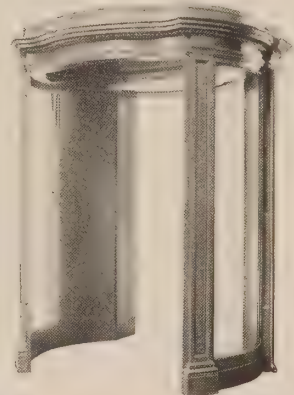
Examples of Van Kannel Adaptability



1192-4 Special design, special 5-A post (see page 10), collapsible C-type hardware.



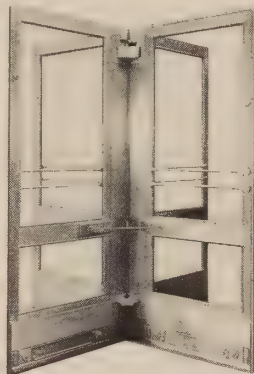
Arts and Craft Design, broken cornice, 9-A post (see page 10), collapsible C-type hardware, quartered oak.



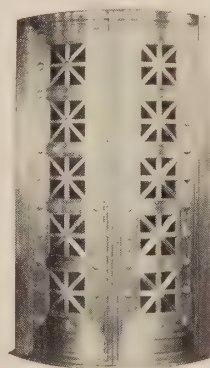
Cast and plate bronze construction over wood core, special design throughout, with glass panels in ceiling for lighting by electricity.



Special design 16-gauge hollow bronze with cast ornaments, collapsible C-type hardware.



16-gauge hollow bronze wings, cast bronze glass moulds, with ornamental cast plate kickplates. Side walls of marble should be used with wings of this character.



Special design circular sliding door, 16-gauge hollow bronze with cast ornaments.



Wings quartered oak ornamental bronze on wood, glass moulds, collapsible C-type hardware.



Special wood sliding door, full open position.



Special wood sliding door, half closed position.



Special wood sliding door, closed position.

Special Constructions



Wood construction with carving, special design. Collapsible C-type hardware. Regular equipment. The exterior is enclosed with sliding doors (circular).



Vestibule design regular, wings special. Vestibule hollow bronze, wings heavy plate bronze with wood cores—bronze ornament cast and applied. Automatic collapsible Type JC mechanism. Regular equipment.



Type V. K. 6 A. P. (see page 4). Plain oak. Shows satisfactory handling of a low cost revolving door to entrance of high class hotel. Design and equipment regular throughout.



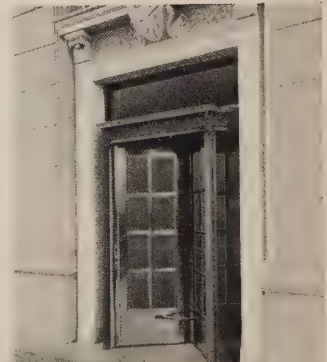
Special cast iron, bronze and wood. Wings wood with bronze, glass in moulds. Collapsible C-type mechanism, equipment regular.



Regular 1192-2 design. Centrally located vestibule with side fillers, all of 16-gauge bronze construction. Collapsible C-type mechanism. Regular equipment.

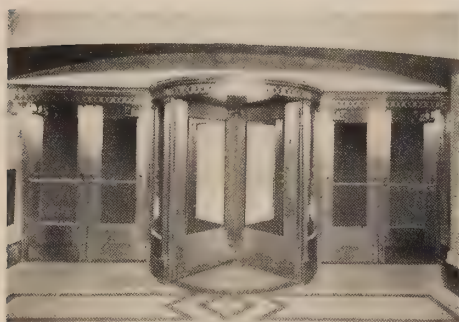


Quartered oak, design, special as regards cornice only, rest of the construction regular 1192-2 or 1192-4. Wood construction, centrally located revolving door vestibule with side swinging doors. Automatic collapsible Type JC mechanism.

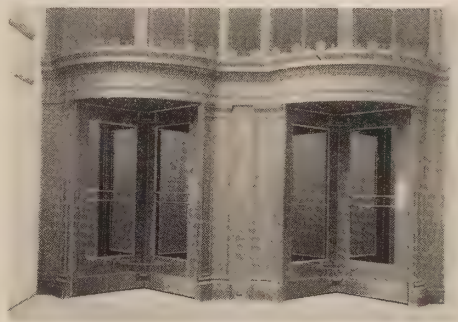


Wood construction with carved special wing design. Collapsible mechanism, C type. Regular equipment.

Special Constructions



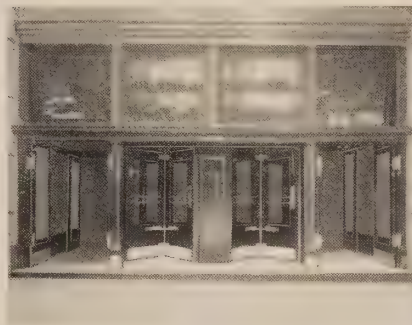
Special design, 1192-4 special, 20-gauge bronze, wood core. Cast Bronze cornice and ornamentation. Automatic collapsible Type JC mechanism. Swing doors equipped with Van Kannel 2-way bronze panic bolts. Equipment regular.



Special 16-gauge bronze over wood core, similar to our 1192-1 U, with exterior ornamental cast and drawn bronze cornice pilasters and panels. Automatic collapsible Type JC mechanism. Regular equipment.



Wood construction 1192-2, regular design with filler. Automatic collapsible Type JC mechanism. Regular equipment.



Wood construction, mahogany, 1192-4 adaptation. Revolving doors in pairs with side swinging doors. Automatic collapsible Type JC mechanism. Regular equipment.



Wood construction 1192-4, regular design with side swinging doors. Automatic collapsible Type JC mechanism. Regular equipment.



Wood door construction with carved cornice. Side swinging doors, with special hardware. Automatic collapsible Type JC mechanism. Regular equipment.



Wood door construction 1192-4 with special panels and extension posts to permit use of screen swinging doors in summer. Collapsible Type C mechanism. Regular equipment. Dead bolts instead of cylinder locks are used.

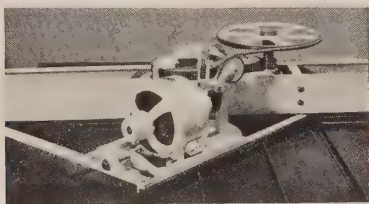
Special Features

Flexed Walls

When connection with building is made at the center of the circular enclosure and it is desired to make the full width of the vestibule available for exit in case of emergency, each wall of the enclosure is made with two hinged sections, which are held in their closed position by bolts. These bolts are so applied that when the pressure between the walls or against the inside becomes unusual the walls flex or swing open into the position shown by illustrations 7 and 8 on page 15.

Electrifying the Door

Though a large number of the better entrances used in banks, hotels, office buildings, public institutions, restaurants, stores and the like, are propelled by those who enter, in many cases it has been found desirable to



Motor control device for Van Kannel
Revolving Doors

control the door by a motor. The accompanying illustration shows a close-up of the Van Kannel Motor Controlled Device.

The mechanism is located in the ceiling chamber—the motive power being a $\frac{1}{4}$ H. P. motor. The mechanical parts are arranged to be run at a speed of about 200 revolu-

tions per minute, being furnished for 110, 115 or 220 volts, direct current. For alternating currents there are extra special mechanical attachments. The motor is so arranged that the wings may be constantly rotated, so that a door attendant may start the wings rotating by pushing a button when it is desired to have the wings revolve in order that people may pass through the vestibule. This device, illustrated and described herein, is especially adapted for doors installed in hotels and department stores.

Speed Control

The speed at which a Van Kannel Door may revolve is limited to a normal rate and controlled by an exclusive Van Kannel feature as described on page 9 under "Standard Equipment."

Automatic Burglar Lock

In Van Kannel Doors, exclusively, you can get an automatic, electrically controlled burglar lock which is a gravity lock located in the ceiling chamber of the revolving door vestibule. Two locks are located on the quarter line which is inside the vestibule opening into the building. This electrical device is controlled by a solenoid which holds the gravity lock in position. As many stations as may be desired can be located throughout the banking quarters or building which will connect with and control this burglar lock, instantly locking the door by the pressure of a button.

Automatic burglar locks are found exclusively on Van Kannel doors. These are electrically controlled and may therefore be actuated from any part of the building, insuring the instantaneous locking of all exit doors.

Service

Service to Owners

The Van Kannel Revolving Door Co. is prepared to survey the entrance of any building and to make plans, write specifications and design doors which will be in architectural keeping with the building. We will make suggestions as to type of construction and materials or will submit prices for any materials which may be desired. No charges are made for this service.

Service to Architects

The Van Kannel Revolving Door Co. maintains an efficient drafting room which is at the disposal of architects. We are in a position to submit detailed plans and specifications covering any type or form of construction of Revolving Doors desired. We are also prepared to send

experts to interview architects and help them to make Revolving Door layouts which will harmonize with their projects. There is no charge for this service.

Nation Wide Sales Service

The country-wide service and sales staff of the Van Kannel organization insures prompt attention to clients' inquiries and the personal services of a representative of the Company.

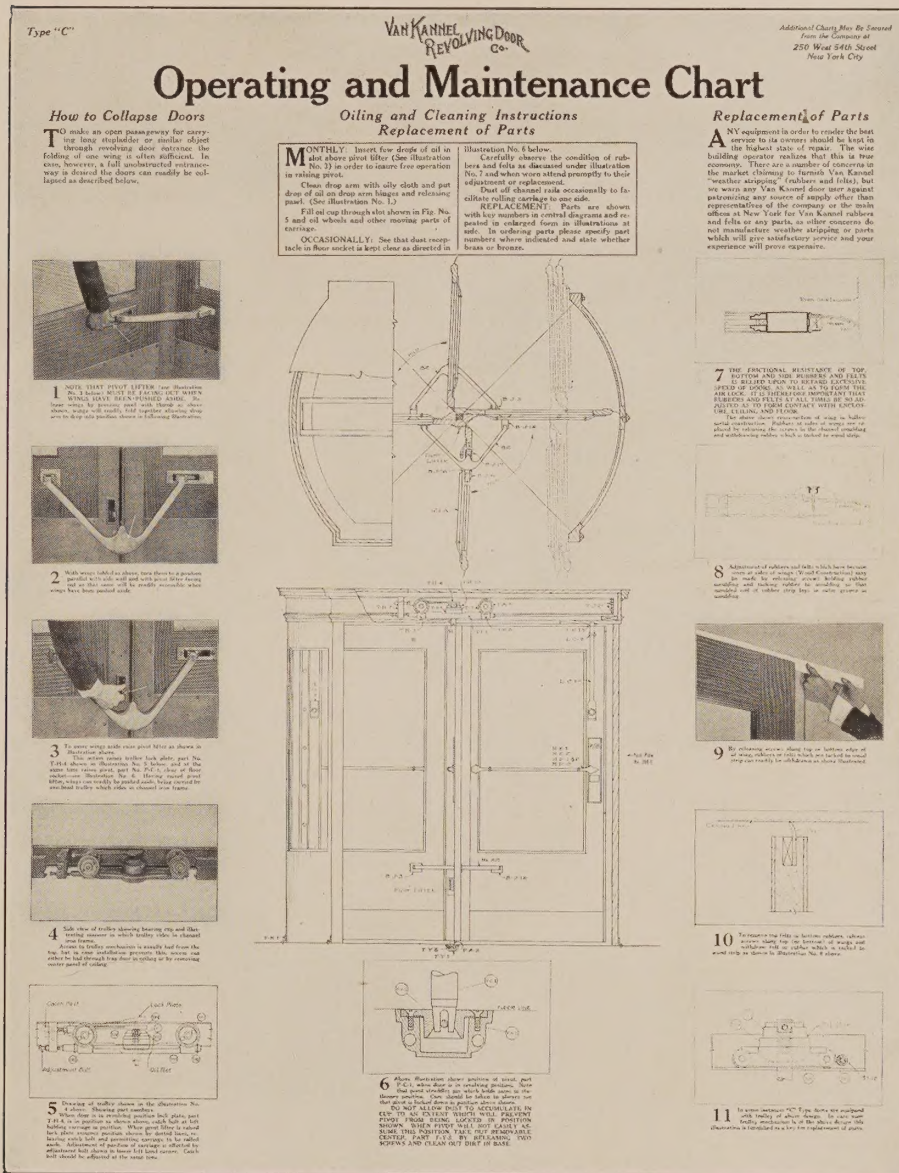
Dependability

It has been aptly said—"First you build—then you simplify." Thirty years' experience in the manufacture of Revolving Doors guarantees the purchaser of a Van Kannel Door the utmost in simplicity and dependability.

Operating Instructions

A Feature of Van Kannel Service

Reproduction of Wall Chart, Actual Size 22" x 28"



EVERY Van Kannel Revolving Door must give continuous satisfaction. To enable purchasers to get the best service obtainable from their Van Kannel doors, an illustrated chart is delivered upon erection of the door. These charts show all working parts. They give explicit instructions for operating and oiling doors.

They also furnish a simple key for ordering any parts

which are subject to wear and which may need replacement.

The charts measure 22 x 28 inches and are designed for every type of Van Kannel door manufactured.

The Van Kannel Revolving Door Company periodically correspond with every purchaser as an insurance that their doors are rendering the maximum of satisfaction.

Van Kannel Nation Wide Service



Van Kannel Sales and Service Representatives are located at each city above shown. This nationwide sales organization makes for dispatch and for the continued satisfaction of every Van Kannel Revolving Door purchaser.

